LYON SHIPYARD

April 29, 2016

Dept. of Environmental Quality
Tidewater Regional Office
Attn: Mr. Carl D Thomas
5636 Southern Boulevard
Virginia Beach, VA 23462

SUBJECT: Permit Application (VA0089168)

Mr. Thomas,

Attached to this letter is the permit application for the reissuance of VA0089168. Lyon Shipyard has had much success over the last five years under it current permit by the continuous reduction in Total Suspended Solids. The reduction is primarily due to the application of Best Management Practices (BMPs).

Collection of 100 percent of process water on the dry-dock (outfall 001) has occurred within the current permit cycle. The collection has taken away the need for treatment devices to discharge to surface waters. The current process is that process water is collected at the bow of the vessel via drainage to holding tanks. Once in the tanks, a pump with an automatic float switch pumps the process water via pipes into a (2) 10,000 gallon tanks located on shore. The tanks are then emptied by a contractor and hauled off site for disposal. It is Lyon Shipyard's intent to continue this process in the reissuance of the permit. Lyon Shipyard respectfully requests a waiver for sampling.

Considerations in the permit application consist of the following:

1. For outfalls 003 defined as a pressure relief discharge in the current permit are on the forms 2E. We respectfully request a waiver for no sampling. The device used is for fire suppression and testing purposes only. The source of water is drawn from the receiving stream with no chemical additions.
2. I request that 002 storm water sampling be excluded from the new permit.

a. Outfall 002 is a concrete collection basin that discharges into the receiving stream after filtration from straw bails. Collecting a sample post straw bails before discharging into receiving stream is not practical due to the setup of quay wall and structures. A representative sample is thus unattainable.

In conclusion, Lyon Shipyard will continue to search technological advances and improvements in BMPS for a better environment.

VR

Daniel N. Terry

Asst. Environmental Manager

Office: (757) 622-4661 ext. 472

Cell: (757) 323-2599 *>><(((">*

Please print or type in the unshaded areas only.

Form Approved. OMB No. 2040-0086.

FORM 1 GENERAL

U.S. ENVIRONMENTAL PROTECTION AGENCY
GENERAL INFORMATION
Consolidated Permits Program
(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER: S F VAD988166443 T/A C D

LABEL ITEMS

I. EPA I.D. NUMBER
III. FACILITY NAME
V. FACILITY MAILING ADDRESS
VI. FACILITY LOCATION

VAD988166443
LYON SHIPYARD – SEALIFT
PO BOX 2180 NORFOLK, VA 23501
307 CAMPOSTELLA RD NORFOLK, VA 23523

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms**.

SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.**? (FORM 2A)		X		B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge** to **waters of the U.S.**? (FORM 2B)		X	
	16	17	18		19	20	21
C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)	X		X	D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.**? (FORM 2D)		X	
	22	23	24		25	26	27
E. Does or will this facility treat, store, or dispose of **hazardous wastes**? (FORM 3)		X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
	28	29	30		31	32	33
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
	34	35	36		37	38	39
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5)		X	
	40	41	42		43	44	45

III. NAME OF FACILITY

C 1 SKIP: Lyon Shipyard-Sealift
15 16 – 29 30 69

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*: C 2 Thomas Beacham (15 16 45)
B. PHONE *(area code & no.)*: (757) 622-4661 (46 48 49 51 52- 55)

V. FACILTY MAILING ADDRESS

A. STREET OR P.O. BOX: C 3 PO Box 2186 (15 16 45)

B. CITY OR TOWN: C 4 Norfolk (15 16 40)
C. STATE: VA (41 42)
D. ZIP CODE: 23501 (47 51)

HP
RECEIVED – DEQ
APR 29 2016
Tidewater Regional Office

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: C 5 307 Campostella Road (15 16 45)

B. COUNTY NAME: NA (46 70)

C. CITY OR TOWN: C 6 Norfolk (15 16 40)
D. STATE: VA (41 42)
E. ZIP CODE: 23523 (47 51)
F. COUNTY CODE *(if known)*: NA (52 -54)

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

VII. SIC CODES *(4-digit, in order of priority)*

A. FIRST	B. SECOND
3731 *(specify)* Shipbuilding and Repair	3732 *(specify)* Shipbuilding and Repair
C. THIRD	**D. FOURTH**
4499 *(specify)* Marine Railways and drydocking vessels	*(specify)*

VIII. OPERATOR INFORMATION

A. NAME: Lyon Shipyard

B. Is the name listed in Item VIII-A also the owner? ☐ YES ☑ NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box: if "Other," specify.)*

F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC *(other than federal or state)*
O = OTHER *(specify)*

P

(specify)

D. PHONE *(area code & no.)*: A (757) 622-4661

E. STREET OR P.O. BOX: PO Box 2180

F. CITY OR TOWN: Norfolk

G. STATE: VA

H. ZIP CODE: 23501

IX. INDIAN LAND

Is the facility located on Indian lands? ☐ YES ☑ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES *(Discharges to Surface Water)*	D. PSD *(Air Emissions from Proposed Sources)*
9 N VA0089168	9 P 710-00251 (Reg # 61289)
B. UIC *(Underground Injection of Fluids)*	**E. OTHER** *(specify)*
9 U	9 *(specify)*
C. RCRA *(Hazardous Wastes)*	**E. OTHER** *(specify)*
9 R VAD988166443	9 *(specify)*

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS *(provide a brief description)*

Facility is a shipbuilding and repair facility located on the eastern branch of the Elizabeth River. Vessels serviced include but not limited to: tugboats, various barges, dredges, and smaller military vessels.

Ship repair involves various operations such as abrasive blasting with coal utility slag, waterblasting, waterwashing, and painting applications to marine structures. This facility operates one drydock with the purpose of removing vessels from the water.

Welding, burning and grinding operations are performed with the purpose of repairing damaged steel structures on marine vessels and structures. Repair of vessel machinery, propulsion and electrical systems are part of the repair capabilities. A website is available at www.lyonshipyard.com for additional information.

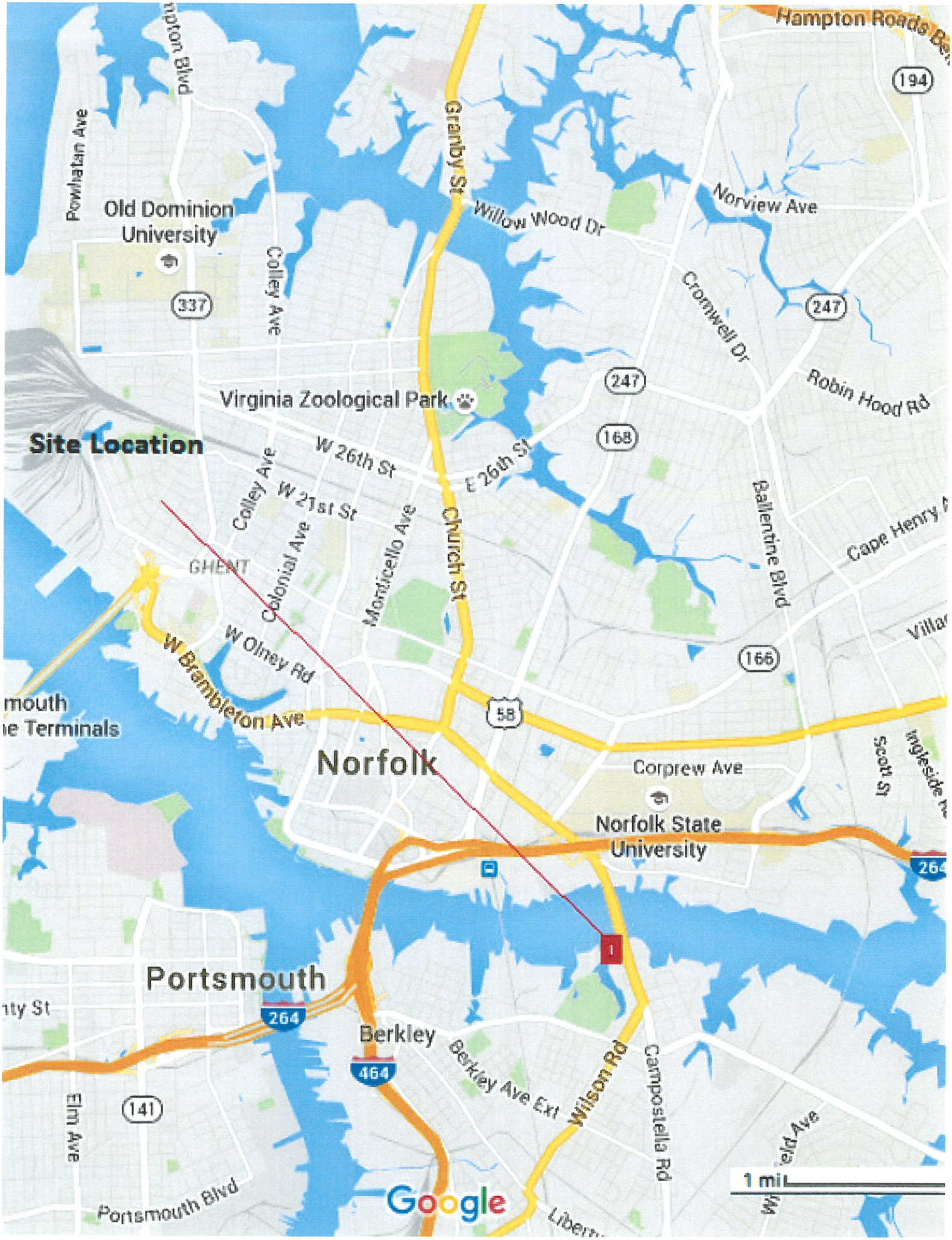
XIII. CERTIFICATION *(see instructions)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE *(type or print)*	B. SIGNATURE	C. DATE SIGNED
Dan Torry / Asst. Environmental Manager		04/29/16

COMMENTS FOR OFFICIAL USE ONLY

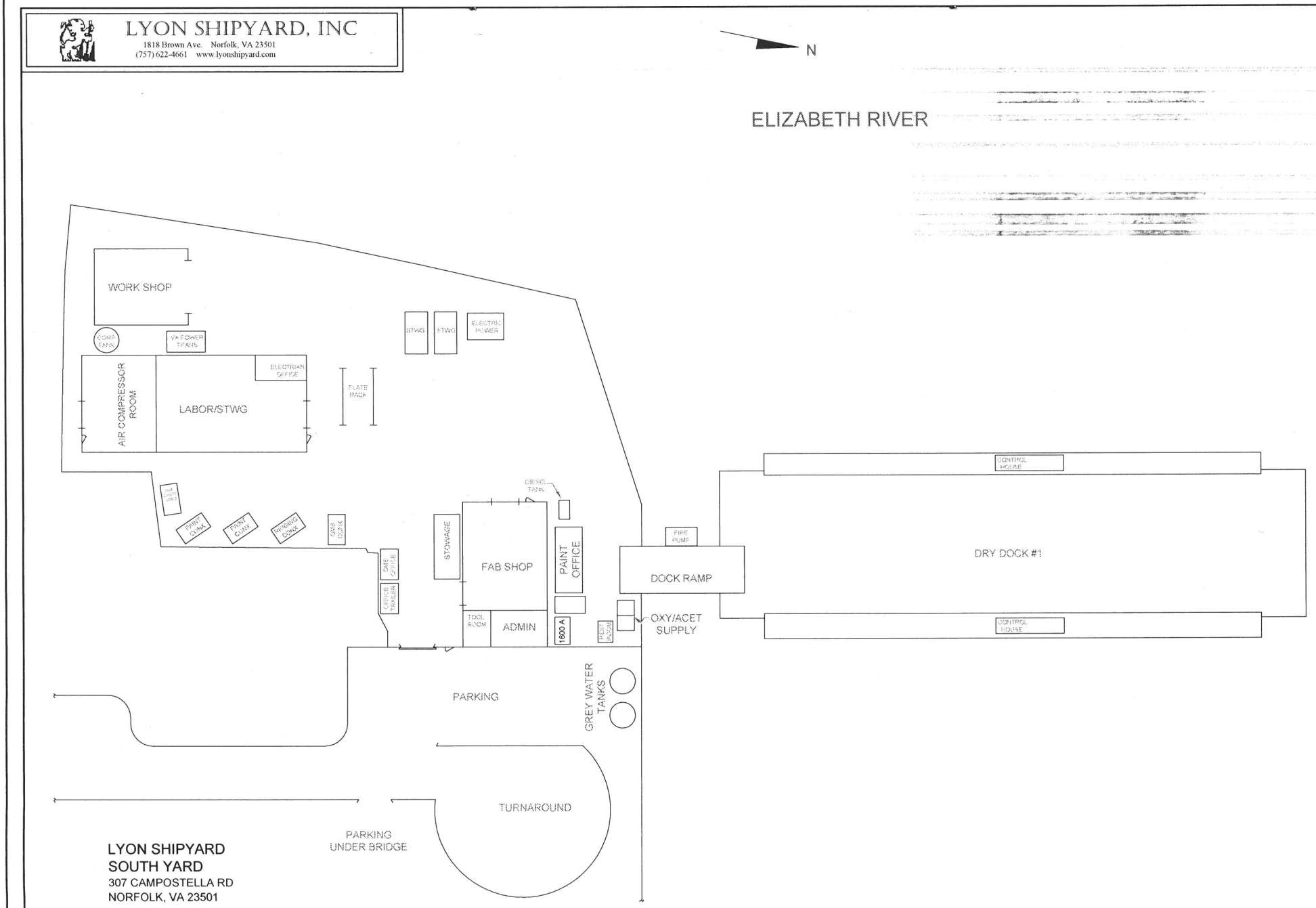
EPA Form 3510-1 (8-90)


Site Location
Old Dominion University
Virginia Zoological Park
Norfolk
Portsmouth
Berkley
Norfolk State University
Corprew Ave
GHENT
Granby St
Church St
Colley Ave
Willow Wood Dr
Norview Ave
Cromwell Dr
Robin Hood Rd
Ballentine Blvd
Cape Henry
W 26th St
E 26th St
W 21st St
Mordicello Ave
Colonial Ave
W Olney Rd
W Brambleton Ave
Wilson Rd
Berkley Ave Ext
Campostella Rd
Elm Ave
Portsmouth Blvd
Powhatan Ave
Scott St
Hampton Roads
337
247
168
166
58
264
464
141
194
1
1 mi
Google


Site
Location
100 ft
166
460
Fillmore St
Campostella Rd
Fillmore St
Fillmore St

LYON SHIPYARD, INC

1818 Brown Ave. Norfolk, VA 23501
(757) 622-4661 www.lyonshipyard.com



LYON SHIPYARD
SOUTH YARD
307 CAMPOSTELLA RD
NORFOLK, VA 23501

SCALE: $\frac{1}{32}$" = 1' - 0"

Please print or type in the unshaded areas only.

EPA ID Number (*copy from Item 1 of Form 1*)
VAD988166443

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

FORM 2F NPDES

U.S. Environmental Protection Agency
Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number (*list*)	B. Latitude			C. Longitude			D. Receiving Water (*name*)
901	36.	00	50.00 17.91	-76.	00	15.00 54.90	Eastern Branch of Elizabeth River
002	36.	00	50.00 17.13	-76.	00	15.00 54.58	Eastern Branch of Elizabeth River

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
None					

B: You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfalls(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage of disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which received storm water discharges from the facility.

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of imperious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface *(provide units)*	Total Area Drained *(provide units)*	Outfall Number	Area of Impervious Surface *(provide units)*	Total Area Drained *(provide units)*
901	Approx. 31,875 sqft	Ap 31,875 sqft			
002	Approx. 150 sqft	Ap 18,000 sqft			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

Shipyard spent abrasives- materials are stored in bins on property for hauling to approved sites as needed.
Maritime paints- minimal amount of paint is placed on site to allow for appliction. Paint waste is drummed and disposed of as Hazardeous waste. Paint cans are emptied and hauled to approved sites.
Materials that are ordered are logged by recieving and generally stored inside warehouse(s) prior to job delivery.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
901,002	BMPs are required by existing permit. Facility has SWPPP as a condition as the permit	4-C

V. Nonstormwater Discharges

A. I certify under penalty of law hat the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or From 2E application for the outfall.

Name and Official Title *(type or print)*	Signature	Date Signed

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

NA

EPA ID Number *(copy from Item 1 of Form 1)*
VAD988166443

VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided.
Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis – is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☑ Yes (*list all such pollutants below*) ☐ No (*go to Section IX*)

Total Cu
Total Zn

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☑ Yes (*list all such pollutants below*) ☐ No (*go to Section IX*)

Yes, under current permit requirements acute toxicity test is performed for outfalls 901, 902, and 903. Both shrimp and minnows are utilized.

IX. Contract Analysis Information

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☑ Yes (*list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below*) ☐ No (*go to Section X*)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
Universal Laboratories	220 Research Drive Hampton, VA 23666	757-865-0880	TSS, TPH, Toxicity, Dissolved Cu and Zn.

X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (*Type Or Print*)	B. Area Code and Phone No.
Dan Terry / Asst. Environmental Manager	757-523-2599
C. Signature	D. Date Signed
	04/29/16

EPA ID Number (*copy from Item 1 of Form 1*)
VAD988166443 Outfall 901

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

VII. Discharge information *(Continued from page 3 of Form 2F)*

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	<5.0 mg/L	N/A			1.00	
Biological Oxygen Demand (BOD5)	38.0 mg/L				1.00	
Chemical Oxygen Demand (COD)	510.6 mg/L				1.00	
Total Suspended Solids (TSS)			81.55		21.00	
Total Nitrogen	4.53 mg/L				1.00	
Total Phosphorus	0.18 mg/L				1.00	
pH	Minimum	Maximum	Minimum 6.30	Maximum 7.70	21.00	

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Dissolved Cu			404.05 ug/L		21.00	
Dissolved Zn			1616.43 ug/		21.00	

EPA ID Number (*copy from Item 1 of Form 1*)
VAD988166443 Outfall 002

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

VII. Discharge information *(Continued from page 3 of Form 2F)*

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	<5.0 mg/L	N/A			1.00	
Biological Oxygen Demand (BOD5)	14 mg/L				1.00	
Chemical Oxygen Demand (COD)	206.8 mg/L				1.00	
Total Suspended Solids (TSS)			879.48		10.00	
Total Nitrogen	3.04 mg/L				1.00	
Total Phosphorus	0.7 mg/L				1.00	
pH	Minimum	Maximum	Minimum 6.90	Maximum 7.60	10.00	

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

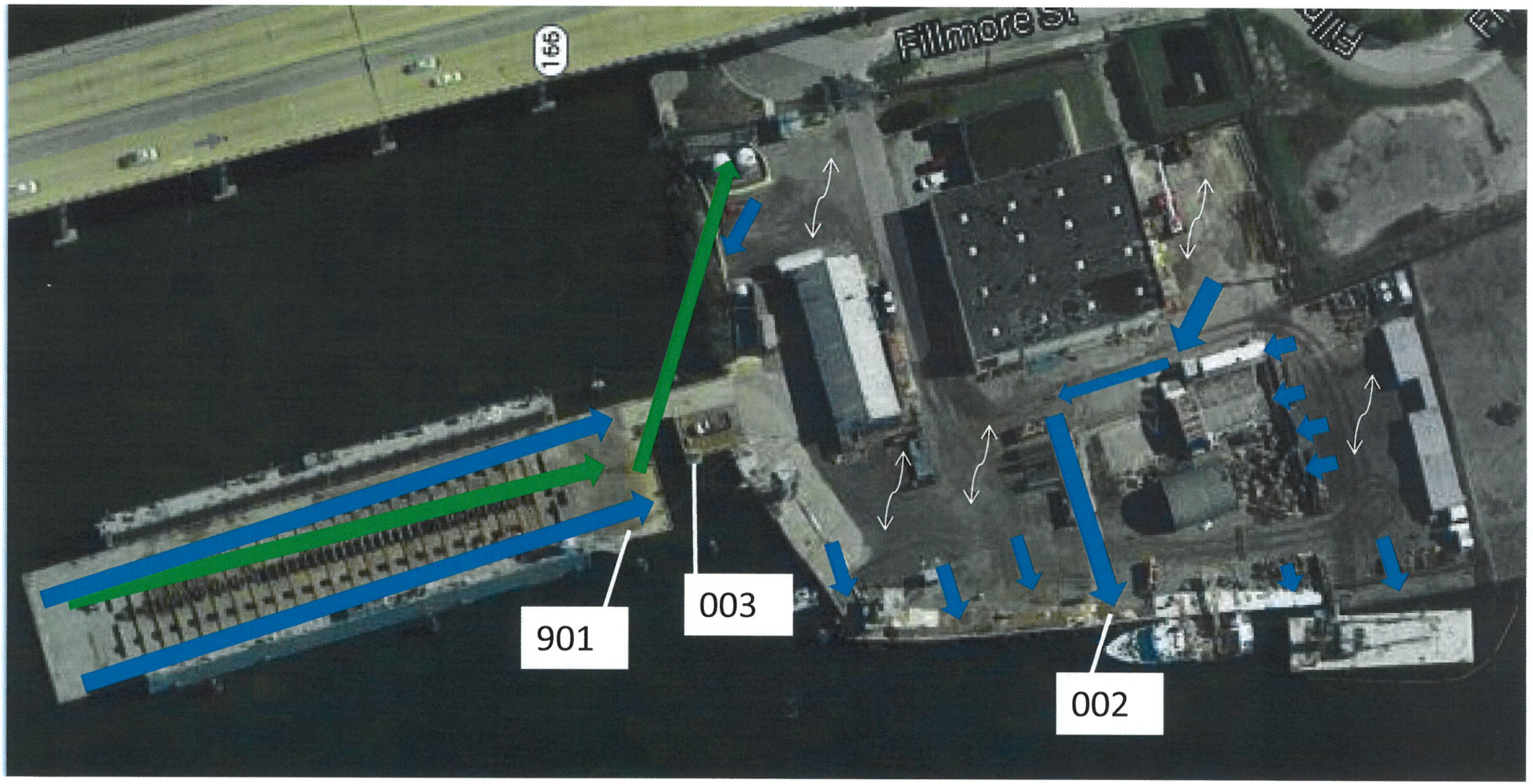
Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Dissolved Cu			183.01 ug/L		10.00	
Dissolved Zn			265.70 ug/		10.00	

Sample Analysis for form 2F Permit App

	Date	Outfall	Cu (ppb)	ZN(ppb)	TSS (ppm)	pH	temp	TPH DRO	TPH GRO	NN	TKN	TN	TP	COD	BOD5	O&G
1	5/9/2012	002	129	45	1908	7.3	20.5	0.6	<0.5							
2	9/18/2012	002	182	41	1001	7.2	25.2	0.7	<0.5							
3	2/8/2013	002	65	174	5.2	7.2		<0.5	<1							
4	10/7/2013	002	93.1	357	4960	8.4	23.7	0.8	<0.5							
5	2/12/2014	002	63	425	40	7.6	2	<0.5	<0.5							
6	7/24/2014	002	162	203	33	7.8	25.2	<0.5	<0.5							
7	5/21/2015	002	604	1030	317	6.9	19.8	5.5	<0.5							
8	11/19/2015	002	178	160	93.6	7.8	16.6	<0.5	<0.5							
9	1/15/2016	002	183	156	55	7.8	10.2	0.7	<0.5							
10	4/12/2016	002	171	66	382	7.8	16.1			0.16	2.88	3.04	0.7	206.8	14	<5
	Average		183.01	265.7	879.48	7.6	17.7	###	<0.5	0.16	2.88	3.04	0.7	206.8	14	<5
	Max		604	1030	4960	8.4	25.2	5.5	<0.5	0.16	2.88	3.04	0.7	206.8	14	<5
	Min		63	41	5.2	6.9	2	<0.5	<0.5	0.16	2.88	3.04	0.7	206.8	14	<5

Sample Analysis for form 2F Permit App

	Date	Outfall	Cu (ppb)	ZN(ppb)	TSS (ppm)	pH	temp	TPH DRO	TPH GRO	NN	TKN	TN	TP	COD	BOD5	O&G
1	1/26/2011	901	139	455	171	7.1	15.1	0.5	<0.5							
2	4/28/2011	901	863	4476	185	7.6	18.9	0.9	<0.5							
3	9/15/2011	901	510	1370	60	7.4	19.7	<0.5	<0.5							
4	3/3/2012	901	40	96	43	7.7	10.8	<0.5	<0.5							
5	5/9/2012	901	359	1401	120	7.4	20.5	1.3	<0.5							
6	9/18/2012	901	72	233	53	6.9	25.9	1	<0.5							
7	10/26/2012	901	575	1459	50	7.1	19.9	0.7	<0.5							
8	2/7/2013	901	461	830	47	7.7	16.3	<0.5	<1							
9	6/3/2013	901	400	1416	79	6.9	24.9	2.1	<0.5							
10	8/1/2013	901	249	418	127	7.3	24.1	2.2	<0.5							
11	11/7/2013	901	123	471	15	7.1	16	<0.5	<0.5							
12	2/12/2014	901	90	529	108	7.7	2.4	0.5	<0.5							
13	4/7/2014	901	804	1773	55	7.4	13.8	2.2	<0.5							
14	7/24/2014	901	106	216	58	6.8	24.8	0.53	<0.5							
15	10/15/2014	901	240	425	82	6.9	24.4	0.6	<0.5							
16	2/22/2015	901	341	3320	130	7	4	0.7	<0.5							
17	5/21/2015	901	611	2390	98.5	6.5	19.9	2.3	<0.5							
18	8/31/2015	901	85	206	25	7.2	25.3	<0.5	<0.5							
19	11/19/2015	901	402	385	56.8	7.4	17.2	<0.5	<0.5							
20	1/15/2016	901	411	3399	68	6.8	9.4	1.9	<0.5							
21	4/12/2016	901	1604	8677	81.2	6.3	15.3	5	<0.5	<0.1	4.53	4.53	0.18	510.6	38	<5
	Average		404.048	1616.43	81.547619	7.2	17.6	###	###	<0.1	4.53	4.53	0.18	510.6	38	<5
	Max		1604	8677	185	7.7	25.9	5	<0.5	<0.1	4.53	4.53	0.18	510.6	38	<5
	Min		40	96	15	6.3	2.4	<0.5	<0.5	<0.1	4.53	4.53	0.18	510.6	38	<5



Process water (collection)

Stormwater

Stormwater infiltration

Universal Laboratories
20 Research Drive
Hampton, VA 23666
Phone: 1-800-695-2162
Fax: 757-865-8014

Client Report For:	**Lyon Shipyard Inc.**
Attention:	Mr. Dan Terry
Client Address:	P.O. Box 2180 Norfolk, VA 23501
Project:	**VPDES Permit App Sealift Drydock OF-901**
Order Number:	**1603033**
Report Date:	04/19/2016
Lab Receipt Date:	04/12/2016
Comment:	This report contains the analytical results for the indicated Project and Order. The results contained in this report relate only to the samples identified in this Order. The analytical results meet all requirements of NELAC unless specifically stated. This report shall not be reproduced except in full.

The data in this report has been reviewed and validated by: Carol K Zero — Signature

Carol K Zero — Name

Pres/Tech Director — Title

Universal Laboratories

Client: Lyon Shipyard Inc. | **Client Sample ID:** OF-901 Grab
Lab ID: 1603033-001 | **Collection Date:** 04/12/2016 11:09
Permit ID VA0089168 | **Matrix:** AQUEOUS

Analyses

Biochemical Oxygen Demand (BOD) 5 Day — *SM 5210 B (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Holding Time Met	Yes	Yes/No		04/13/2016 16:05	LP		
Sample Receipt Temperature	1	C		04/13/2016 16:05	LP		
Biochemical Oxygen Demand	38	mg/L	2	04/13/2016 16:05	LP		460036

Chemical Oxygen Demand — *HACH 8000*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sample Preservation pH	0	pH Units		04/14/2016 12:03	LP		
Holding Time Met	Yes	Yes/No		04/14/2016 12:03	LP		
Sample Receipt Temperature	1	C		04/14/2016 12:03	LP		
Chemical Oxygen Demand	510.6	mg/L	20	04/14/2016 12:03	LP		460036

Oil and Grease — *EPA 1664A*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sample Preservation pH	1	pH Units		04/14/2016 13:40	EK		
Holding Time Met	Yes	Yes/No		04/14/2016 13:40	EK		
Sample Receipt Temperature	1	C		04/14/2016 13:40	EK		
Oil and Grease	ND	mg/L	5	04/14/2016 13:40	EK		460036

Nitrogen, Total — *EPA 351.2/ EPA 353.2*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sample Preservation pH	0	pH Units		04/14/2016 12:50	EK		
Holding Time Met	Yes	Yes/No		04/14/2016 12:50	EK		
Sample Receipt Temperature	1	C		04/14/2016 12:50	EK		
Nitrate/Nitrite as N	ND	mg/L	0.1	04/14/2016 12:50	EK		460036
Nitrogen, Total Kjeldahl	4.53	mg/L	0.2	04/14/2016 12:50	EK		460036
Nitrogen, Total	4.53	mg/L	0.2	04/14/2016 12:50	EK		

Phosphorus, Total — *EPA 365.1*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sample Preservation pH	0	pH Units		04/14/2016 22:02	EK		
Holding Time Met	Yes	Yes/No		04/14/2016 22:02	EK		
Sample Receipt Temperature	1	C		04/14/2016 22:02	EK		
Phosphorus, Total	0.18	mg/L	0.02	04/14/2016 22:02	EK		460036

Glossary of Terms and Abbreviations

ND	No Analyte Detected
NR	No Results available, analyte not in instrument calibration
RL	(Reporting Limit) The minimum levels, concentrations, or quantities of a target analyte that can be reported within a specified degree of confidence. Generally, this number is equal to or just above the lowest calibration standard run with the analytical batch.
B	Analyte was found in the method blank
D	RPD outside acceptable limits
H	Holding time exceeeded
IS	Internal standard outside acceptable limits
J	Result above calibration curve - results are approximate
L	LCS Outside acceptable limits
MI	Matrix interence
MS	Matrix spike recovery outside acceptable limits
QC	Method QC criteria not met
S	Surrogate outside acceptable limits
V	ICV/CCV/FCV outside acceptable limits
LCS	(Laboratory Control Sample) A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	Method Detection Limitis is an estimate of the minimum amount of a substance that an analytical process can reliably detect
RPD	(Relative Percent Difference) The difference between a set of duplicates or sample spike duplicates.
MS/MSD	(Matrix Spike or Matrix Spike Duplicate) A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analytes concentration is available. Matrix Spikes are used, for example, to determine the effect of the matrix on a method's recovery efficiency.
Calibration Verfication	(Initial, Continuing, or Final) A standard analyzed at different times to verify that the initial calibration curve is still valid.
Holding Time	The maximum time that samples may be held prior to analysis and still be considered valid or not compromised.
Internal Standard	A known amount of standard added to a test portion of a sample as a reference for evaluating and controlling the precision and bias of the applied analytical method.
Method Blank	A sample of a matrix similar to the batch associated samples (when available) that is free from the analytes of interest and is processed simulatanously with and under the same conditions as samples.
Surrogate	A substance with properties that mimic the analyte of interest. It is unlikely to be found in environmental samples and is added to them for quality control purposes in Organics.
EPL	Exceeds Permit Limit. This is a qualifier to denote that the result exceeds the permit limit of the sample location.
Exceeds Benchmark Concentration	Result Exceeds Benchmark concentration listed in the General Permit. Benchmark Concentrations are primarily used to determine the overall effectivenss of the Stormwater pollution prevention plan. Excedence of Benchamrk concentrations does NOT constitute a violation of this permit and does NOT indicate that violation of a water quality standard has occured.

Universal Laboratories

CHAIN OF CUSTODY

ID: 1603033

South yard

VPDES Permit App Sealift Drydock OF-901

Lyon Shipyard Inc.
P.O. Box 2180
Norfolk,VA,23501

Contact:Dan Terry,757-622-4661,DTERRY@LYONSHIPYARD.COM

20 Research Drive
Hampton, VA 23666
1-800-695-2162
http://www.universallaboratories.net

Sample Name	UL_Sample ID	Matrix	Sample Date/Time/Initials	BottleID	Sample Container	Preservation	Testing
OF-901 Grab	1603033-001	AQUEOUS	4/12/16 1104/DNT Fem = 4.3 @ 15.3°C @ 1115	001A	1/HDPE	<6°C	BOD, COD, ~~TSS~~, OGT, TN, T.PHOS, ~~METALSDISS, FILTER~~, TRANS using qrt.
		AQUEOUS		~~001B~~	2/HDPE	<6°C	
		AQUEOUS		001C	1/HDPE	H2SO4/<6°C RK	
		AQUEOUS		~~001D~~	500/Polysterene/ dissolved	HNO3/<6°C	
		AQUEOUS		001E	1/Glass	H2SO4/<6°C	
		AQUEOUS		001F	1/Glass	H2SO4/<6°C	
		AQUEOUS		001G	1/Glass	H2SO4/<6°C	

NOTES: pH= 4.0-4.0, 7.0-7.0, 10.0-10.0 7.0=7.1 @ 20.3°C CoolerTemp 1 C

Phenol int check_____ CN int check_____ BOD int check_____ NH3 int check_____

TRANSFER	SIGNATURE	DATE/TIME	TRANSFER	SIGNATURE	DATE/TIME
Relinquished by	[signature]	4/12/16 1400	Received by	Kate Kimbrell	4-12-16 1400
Relinquished by	Kate Kimbrell	4-12-16 1515	Received by		
Relinquished by			Received by		
Relinquished by			Received by		

Universal Laboratories
20 Research Drive
Hampton, VA 23666
Phone: 1-800-695-2162
Fax: **757-865-8014**

Client Report For:	**Lyon Shipyard Inc.**
Attention:	Mr. Dan Terry
Client Address:	P.O. Box 2180 Norfolk, VA 23501
Project:	**VPDES Quarterly OF-901 Sealift Drydock**
Order Number:	**1603259**
Report Date:	04/19/2016
Lab Receipt Date:	04/12/2016
Comment:	This report contains the analytical results for the indicated Project and Order. The results contained in this report relate only to the samples identified in this Order. The analytical results meet all requirements of NELAC unless specifically stated. This report shall not be reproduced except in full.

The data in this report has been reviewed and validated by: Carol K Zeno Signature

Carol K Zeno Name

Pres/Tech Director Title

Universal Laboratories

Client: Lyon Shipyard Inc.	**Client Sample ID:** OF-901 Grab
Lab ID: 1603259-001	**Collection Date:** 04/12/2016 11:09
Permit ID VA0089168	**Matrix:** AQUEOUS

Analyses

Solids, Total Suspended — *SM 2540D (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Holding Time Met	Yes	Yes/No		04/14/2016 11:41	LP		
Sample Receipt Temperature	1	C		04/14/2016 11:41	LP		
Solids, Total Suspended	81.2	mg/L	1	04/14/2016 11:41	LP		460036

pH (Client Provided) — *SM 4500-H B (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
pH	6.3	pH Units	0.1	04/12/2016 11:15	Client		
Temperature	15.3	C		04/12/2016 11:15	Client		

Gasoline Range Organics AQ — *EPA 8260B*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sufficient Sample Volume	Yes	Yes/No		4/15/2016 0:17	LS		
Sample Preservation pH	0	pH Units		4/15/2016 0:17	LS		
Holding Time Met	Yes	Yes/No		4/15/2016 0:17	LS		
Sample Receipt Temperature	1	C		4/15/2016 0:17	LS		
Gasoline Range Organics	ND	mg/L	0.5	4/15/2016 0:17	LS		460036
surrogate 1,2-Dichloroethane-d4 (% Recovery)	68	%	69.5-130.5	4/15/2016 0:17	LS	S	
surrogate 4-Bromofluorobenzene (% Recovery)	88	%	69.5-130.5	4/15/2016 0:17	LS		
surrogate Dibromofluoromethane (% Recovery)	86	%	69.5-130.5	4/15/2016 0:17	LS		
surrogate Toluene-d8 (% Recovery)	104	%	69.5-130.5	4/15/2016 0:17	LS		

Metals Dissolved by ICP — *EPA 200.7*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sample Preservation pH	0	pH Units		04/13/2016 14:07	LS		
Holding Time Met	Yes	Yes/No		04/13/2016 14:07	LS		
Copper, Dissolved	16.042	mg/L	0.005	04/13/2016 14:07	LS		460036
Zinc, Dissolved	8.677	mg/L	0.005	04/13/2016 14:07	LS		460036

Diesel Range Organics AQ — *EPA 8015B*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sample Preservation pH	0	pH Units		15 Apr 2016 11:42 pm	AS		
Holding Time Met	Yes	Yes/No		15 Apr 2016 11:42 pm	AS		
Sample Receipt Temperature	1	C		15 Apr 2016 11:42 pm	AS		
Diesel Range Organics	5.0	mg/L	0.5	15 Apr 2016 11:42 pm	AS		460036

Universal Laboratories

Client: Lyon Shipyard Inc.	**Client Sample ID:** OF-901 Grab
Lab ID: 1603259-001	**Collection Date:** 04/12/2016 11:09
Permit ID VA0089168	**Matrix:** AQUEOUS

Analyses

Diesel Range Organics AQ ***EPA 8015B***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
surrogate o-Terphenyl (% Recovery)	81	%	28.6-144.4	15 Apr 2016 11:42 pm	AS		

Glossary of Terms and Abbreviations

ND	No Analyte Detected
NR	No Results available, analyte not in instrument calibration
RL	(Reporting Limit) The minimum levels, concentrations, or quantities of a target analyte that can be reported within a specified degree of confidence. Generally, this number is equal to or just above the lowest calibration standard run with the analytical batch.
B	Analyte was found in the method blank
D	RPD outside acceptable limits
H	Holding time exceeeded
IS	Internal standard outside acceptable limits
J	Result above calibration curve - results are approximate
L	LCS Outside acceptable limits
MI	Matrix interence
MS	Matrix spike recovery outside acceptable limits
QC	Method QC criteria not met
S	Surrogate outside acceptable limits
V	ICV/CCV/FCV outside acceptable limits
LCS	(Laboratory Control Sample) A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	Method Detection Limitis is an estimate of the minimum amount of a substance that an analytical process can reliably detect
RPD	(Relative Percent Difference) The difference between a set of duplicates or sample spike duplicates.
MS/MSD	(Matrix Spike or Matrix Spike Duplicate) A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analytes concentration is available. Matrix Spikes are used, for example, to determine the effect of the matrix on a method's recovery efficiency.
Calibration Verfication	(Initial, Continuing, or Final) A standard analyzed at different times to verify that the initial calibration curve is still valid.
Holding Time	The maximum time that samples may be held prior to analysis and still be considered valid or not compromised.
Internal Standard	A known amount of standard added to a test portion of a sample as a reference for evaluating and controlling the precision and bias of the applied analytical method.
Method Blank	A sample of a matrix similar to the batch associated samples (when available) that is free from the analytes of interest and is processed simulatanously with and under the same conditions as samples.
Surrogate	A substance with properties that mimic the analyte of interest. It is unlikely to be found in environmental samples and is added to them for quality control purposes in Organics.
EPL	Exceeds Permit Limit. This is a qualifier to denote that the result exceeds the permit limit of the sample location.
Exceeds Benchmark Concentration	Result Exceeds Benchmark concentration listed in the General Permit. Benchmark Concentrations are primarily used to determine the overall effectivenss of the Stormwater pollution prevention plan. Excedence of Benchamrk concentrations does NOT constitute a violation of this permit and does NOT indicate that violation of a water quality standard has occured.

Universal Laboratories

CHAIN OF CUSTODY

ID: 1603259

VPDES Quarterly OF-901 Sealift Drydock

Lyon Shipyard Inc.
P.O. Box 2180
Norfolk,VA,23501

Contact:Dan Terry,757-622-4661,DTERRY@LYONSHIPYARD.COM

20 Research Drive
Hampton, VA 23666
1-800-695-2162
http://www.universallaboratories.net

Sample Name	UL_Sample ID	Matrix	Sample Date/Time/Initials	BottleID	Sample Container	Preservation	Testing
OF-901 Grab	1603259-001	AQUEOUS	4/12/16 1109 DT	001A	1/Glass	H2SO4/<6°C KK	TSS, CPH, GRO, FILTER, TRANS, METALSDISS, DRO
		AQUEOUS	FpH= 6.3@15.3°C@1115	001B	1/Glass	H2SO4/<6°C KK	
		AQUEOUS	Filtered onsite @ 1115	001C	2/HDPE	<6°C	
		AQUEOUS		001D	500/Polysterene/ dissolved	HNO3/<6°C KK	
		AQUEOUS		001E	40/Glass	HCl/<6°C	
		AQUEOUS		001F	40/Glass	HCl/<6°C	
		AQUEOUS		001G	40/Glass	HCl/<6°C	

NOTES: pH = 4.0-4.0, 7.0-7.0, 10.0-10.0 7.0 7.1 @ 20.5°C CoolerTemp 1 C

Phenol int check_____ CN int check_____ BOD int check_____ NH3 int check_____

TRANSFER	SIGNATURE	DATE/TIME	TRANSFER	SIGNATURE	DATE/TIME
Relinquished by	[signature]	04/12/16 1400	Received by	Kate Kimball	4-12-16 1400
Relinquished by	Kate Kimball	4/12-16 1515	Received by		
Relinquished by			Received by		
Relinquished by			Received by		

Universal Laboratories
20 Research Drive
Hampton, VA 23666
Phone: 1-800-695-2162
Fax: **757-865-8014**

Client Report For:	**Lyon Shipyard Inc.**
Attention:	Mr. Dan Terry
Client Address:	P.O. Box 2180 Norfolk, VA 23501
Project:	**VPDES Permit App Sealift Drydock OF-002**
Order Number:	**1603034**
Report Date:	04/19/2016
Lab Receipt Date:	04/12/2016
Comment:	This report contains the analytical results for the indicated Project and Order. The results contained in this report relate only to the samples identified in this Order. The analytical results meet all requirements of NELAC unless specifically stated. This report shall not be reproduced except in full.

The data in this report has been reviewed and validated by: Carol K Zero Signature

Carol K Zero Name

Pres/Tech Director Title

Universal Laboratories

Client: Lyon Shipyard Inc.
Client Sample ID: OF-002 Grab
Lab ID: 1603034-001
Collection Date: 04/12/2016 11:19
Permit ID VA0089168
Matrix: AQUEOUS

Analyses

Biochemical Oxygen Demand (BOD) 5 Day — *SM 5210 B (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Holding Time Met	Yes	Yes/No		04/13/2016 16:05	LP		
Sample Receipt Temperature	1	C		04/13/2016 16:05	LP		
Biochemical Oxygen Demand	14	mg/L	2	04/13/2016 16:05	LP		460036

Chemical Oxygen Demand — *HACH 8000*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sample Preservation pH	0	pH Units		04/14/2016 12:03	LP		
Holding Time Met	Yes	Yes/No		04/14/2016 12:03	LP		
Sample Receipt Temperature	1	C		04/14/2016 12:03	LP		
Chemical Oxygen Demand	206.8	mg/L	20	04/14/2016 12:03	LP		460036

Solids, Total Suspended — *SM 2540D (2011)*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Holding Time Met	Yes	Yes/No		04/14/2016 11:41	LP		
Sample Receipt Temperature	1	C		04/14/2016 11:41	LP		
Solids, Total Suspended	382	mg/L	1	04/14/2016 11:41	LP		460036

Oil and Grease — *EPA 1664A*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sample Preservation pH	1	pH Units		04/14/2016 13:40	EK		
Holding Time Met	Yes	Yes/No		04/14/2016 13:40	EK		
Sample Receipt Temperature	1	C		04/14/2016 13:40	EK		
Oil and Grease	ND	mg/L	5	04/14/2016 13:40	EK		460036

Nitrogen, Total — *EPA 351.2/ EPA 353.2*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sample Preservation pH	0	pH Units		04/14/2016 12:50	EK		
Holding Time Met	Yes	Yes/No		04/14/2016 12:50	EK		
Sample Receipt Temperature	1	C		04/14/2016 12:50	EK		
Nitrate/Nitrite as N	0.16	mg/L	0.1	04/14/2016 12:50	EK		460036
Nitrogen, Total Kjeldahl	2.88	mg/L	0.2	04/14/2016 12:50	EK		460036
Nitrogen, Total	3.04	mg/L	0.2	04/14/2016 12:50	EK		

Phosphorus, Total — *EPA 365.1*

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sample Preservation pH	0	pH Units		04/14/2016 22:02	EK		
Holding Time Met	Yes	Yes/No		04/14/2016 22:02	EK		
Sample Receipt Temperature	1	C		04/14/2016 22:02	EK		
Phosphorus, Total	0.70	mg/L	0.02	04/14/2016 22:02	EK		460036

Universal Laboratories

Client: Lyon Shipyard Inc.	**Client Sample ID:** OF-002 Grab
Lab ID: 1603034-001	**Collection Date:** 04/12/2016 11:19
Permit ID VA0089168	**Matrix:** AQUEOUS

Analyses

Metals Dissolved by ICP ***EPA 200.7***

	Test Result	Unit	RL	Analysis Date	Analysis By	Qualifier	Cert #
Sample Preservation pH	0	pH Units		04/13/2016 14:07	LS		
Holding Time Met	Yes	Yes/No		04/13/2016 14:07	LS		
Copper, Dissolved	0.171	mg/L	0.005	04/13/2016 14:07	LS		460036
Zinc, Dissolved	0.066	mg/L	0.005	04/13/2016 14:07	LS		460036

Glossary of Terms and Abbreviations

ND	No Analyte Detected
NR	No Results available, analyte not in instrument calibration
RL	(Reporting Limit) The minimum levels, concentrations, or quantities of a target analyte that can be reported within a specified degree of confidence. Generally, this number is equal to or just above the lowest calibration standard run with the analytical batch.
B	Analyte was found in the method blank
D	RPD outside acceptable limits
H	Holding time exceeeded
IS	Internal standard outside acceptable limits
J	Result above calibration curve - results are approximate
L	LCS Outside acceptable limits
MI	Matrix interence
MS	Matrix spike recovery outside acceptable limits
QC	Method QC criteria not met
S	Surrogate outside acceptable limits
V	ICV/CCV/FCV outside acceptable limits
LCS	(Laboratory Control Sample) A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	Method Detection Limitis is an estimate of the minimum amount of a substance that an analytical process can reliably detect
RPD	(Relative Percent Difference) The difference between a set of duplicates or sample spike duplicates.
MS/MSD	(Matrix Spike or Matrix Spike Duplicate) A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analytes concentration is available. Matrix Spikes are used, for example, to determine the effect of the matrix on a method's recovery efficiency.
Calibration Verfication	(Initial, Continuing, or Final) A standard analyzed at different times to verify that the initial calibration curve is still valid.
Holding Time	The maximum time that samples may be held prior to analysis and still be considered valid or not compromised.
Internal Standard	A known amount of standard added to a test portion of a sample as a reference for evaluating and controlling the precision and bias of the applied analytical method.
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Surrogate	A substance with properties that mimic the analyte of interest. It is unlikely to be found in environmental samples and is added to them for quality control purposes in Organics.
EPL	Exceeds Permit Limit. This is a qualifier to denote that the result exceeds the permit limit of the sample location.
Exceeds Benchmark Concentration	Result Exceeds Benchmark concentration listed in the General Permit. Benchmark Concentrations are primarily used to determine the overall effectivenss of the Stormwater pollution prevention plan. Excedence of Benchamrk concentrations does NOT constitute a violation of this permit and does NOT indicate that violation of a water quality standard has occured.

Universal Laboratories

CHAIN OF CUSTODY

ID: 1603034

Lyon Shipyard Inc.
P.O. Box 2180
Norfolk,VA,23501

Contact:Dan Terry,757-622-4661,DTERRY@LYONSHIPYARD.COM

20 Research Drive
Hampton, VA 23666
1-800-695-2162
http://www.universallaboratories.net

VPDES Permit App Sealift Drydock OF-002

Sample Name	UL_Sample ID	Matrix	Sample Date/Time/Initials	BottleID	Sample Container	Preservation	Testing
OF-002 Grab	1603034-001	AQUEOUS	4/12/16 1119 [illegible]	001A	1/HDPE	<6°C	BOD, COD, TSS, OGT, TN, T.PHOS, METALSDISS, FILTER, TRANS
		AQUEOUS	FPH = 07.8 @ 16.1°C	001B	2/HDPE	<6°C	
		AQUEOUS	Filtered on site @ 1123	001C	1/HDPE	H2SO4/<6°C KK	
		AQUEOUS		001D	500/Polysterene/ dissolved	HNO3/<6°C KK	
		AQUEOUS		001E	1/Glass	H2SO4/<6°C	
		AQUEOUS		001F	1/Glass	H2SO4/<6°C	
		AQUEOUS		001G	1/Glass	H2SO4/<6°C	

NOTES: pH= 4.0-4.0, 7.0-7.0, 10.0-10.0 7.0=7.1 @ 20.3°C CoolerTemp 1 C

Phenol int check_____ CN int check_____ BOD int check_____ NH3 int check_____

TRANSFER	SIGNATURE	DATE/TIME
Relinquished by	[signature]	4/12/16 1400
Relinquished by	Katy Kimbrell	4-12-16 1515
Relinquished by		
Relinquished by		

TRANSFER	SIGNATURE	DATE/TIME
Received by	Katy Kimbrell	4-12-16 1400
Received by		
Received by		
Received by		

Please print or type in the unshaded areas only.

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)
VAD988166443

Form Approved.
OMB No. 2040-0086.
Approval expires 3-31-98.

FORM 2C NPDES

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (*list*)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (*name*)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
001	36.00	50.00	17.00	76.00	15.00	54.00	Eastern Branch of Elizabeth River

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (*e.g., for certain mining activities*), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUT-FALL NO. (*list*)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (*list*)	b. AVERAGE FLOW (*include units*)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
001	Waterwashing,sandblasting, Painting	563 GPD (collected)	waterwashing from operations on drydock is collected	4-A	
	Stormwater, ballast water				

OFFICIAL USE ONLY (*effluent guidelines sub-categories*)

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☑ YES (*complete the following table*) ☐ NO (*go to Section III*)

1. OUTFALL NUMBER (*list*)	2. OPERATION(s) CONTRIBUTING FLOW (*list*)	3. FREQUENCY a. DAYS PER WEEK (*specify average*)	3. FREQUENCY b. MONTHS PER YEAR (*specify average*)	4. FLOW a. FLOW RATE (*in mgd*) 1. LONG TERM AVERAGE	4. FLOW a. FLOW RATE (*in mgd*) 2. MAXIMUM DAILY	4. FLOW B. TOTAL VOLUME (*specify with units*) 1. LONG TERM AVERAGE	4. FLOW B. TOTAL VOLUME (*specify with units*) 2. MAXIMUM DAILY	4. FLOW C. DURATION (*in days*)
001	Waterwashing	0.307 days per week	0.526 months per year	0.0005 MGD	0.035MGD	0.0005 MGD	0.035MGD	2

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ YES (*complete Item III-B*) ☑ NO (*go to Section IV*)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (*or other measure of operation*)?

☐ YES (*complete Item III-C*) ☐ NO (*go to Section IV*)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION a. QUANTITY PER DAY	1. AVERAGE DAILY PRODUCTION b. UNITS OF MEASURE	1. AVERAGE DAILY PRODUCTION c. OPERATION, PRODUCT, MATERIAL, ETC. (*specify*)	2. AFFECTED OUTFALLS (*list outfall numbers*)

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☐ YES (*complete the following table*) ☑ NO (*go to Item IV-B*)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS a. NO.	2. AFFECTED OUTFALLS b. SOURCE OF DISCHARGE	3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE a. REQUIRED	4. FINAL COMPLIANCE DATE b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (*or other environmental projects which may affect your discharges*) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)
VAD988166443

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
No reason to believe that any polluants listed in Table 2c-3 are present and or discharged.			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ YES (*list all such pollutants below*) ☑ NO (*go to Item VI-B*)

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ YES (*identify the test(s) and describe their purposes below*) ☑ NO (*go to Section VIII*)

All process water from waterwashing is collected. No discharge to surface, subsurface, or groundwater occurs.

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☐ YES (*list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below*) ☑ NO (*go to Section IX*)

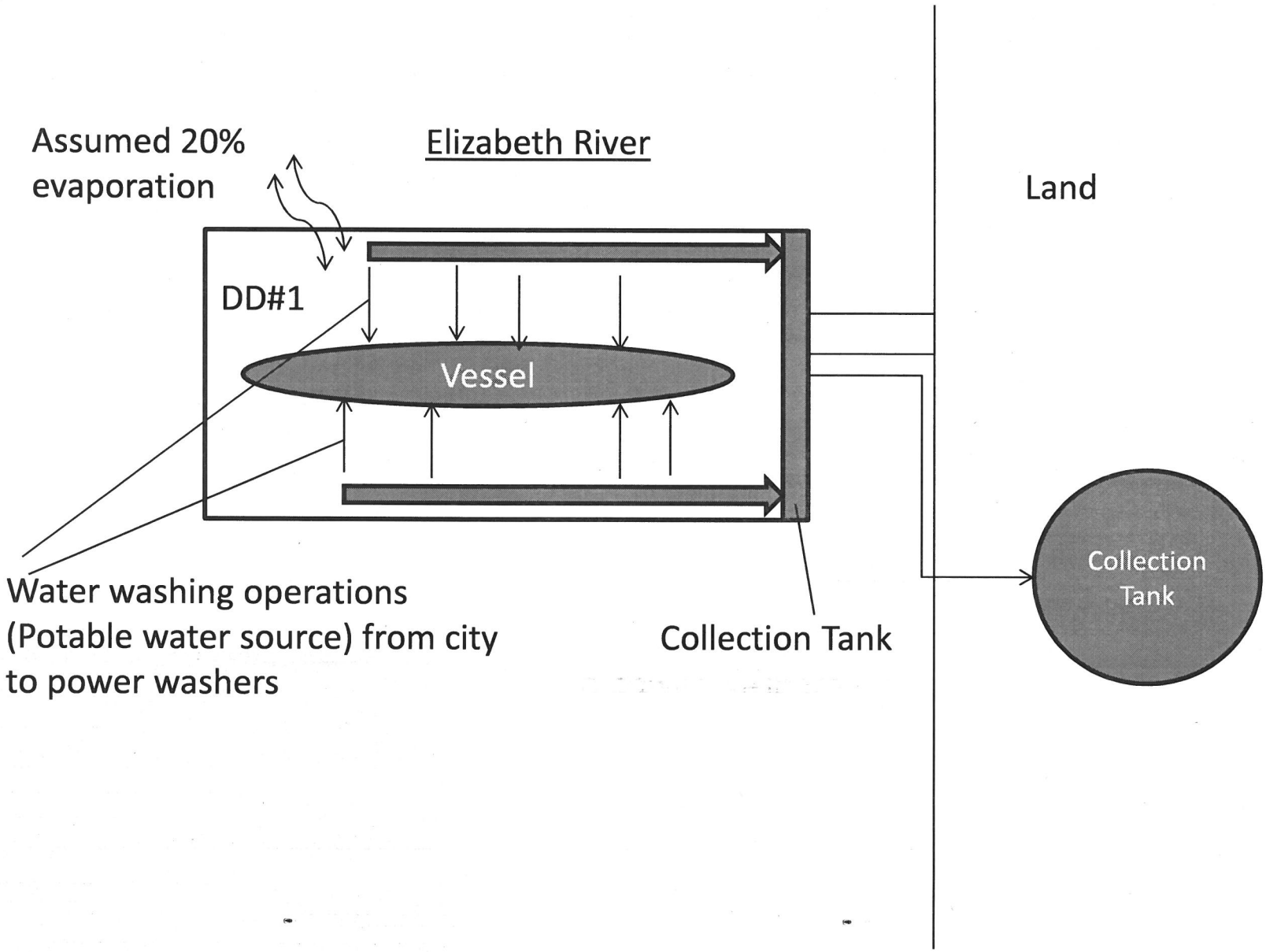
A. NAME	B. ADDRESS	C. TELEPHONE (*area code & no.*)	D. POLLUTANTS ANALYZED (*list*)
Universal Laboratories	220 Research Drive Hampton, VA 23666	757-865-0880	

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (*type or print*)	B. PHONE NO. (*area code & no.*)
Dan Terry	757-323-2599
C. SIGNATURE	D. DATE SIGNED
	04-29-16

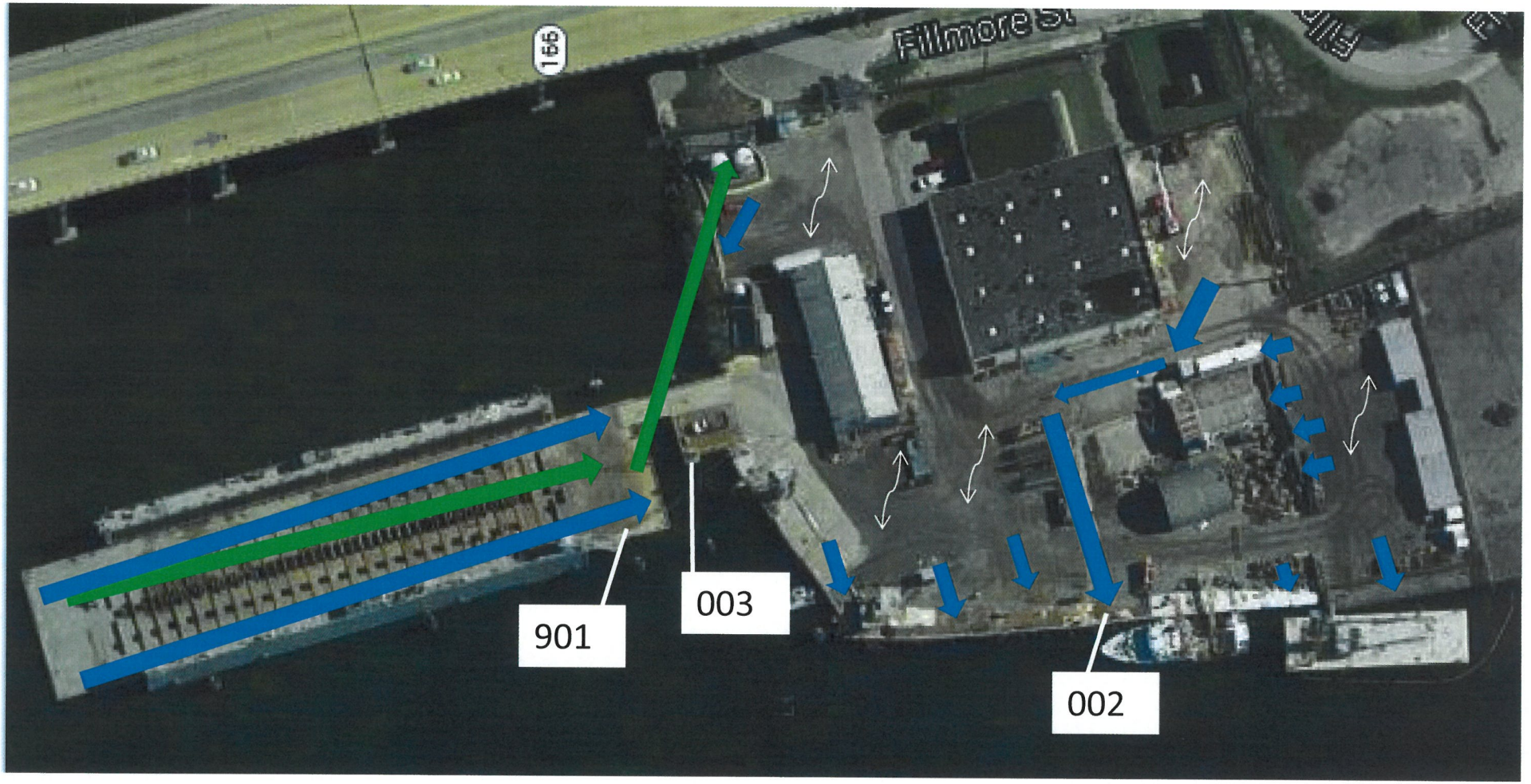
DD#1 Water flow



Process Water removed from Dry Dock #1

Year	Gallons	Gallons Per day
2011	296,212	812
2012	176,349	483
2013	219,521	601
2014	160,226	439
2015	198,510	544
2016*	39,025	500
	AVG:	563

** As of 3/18/16*



Process water (collection)

Stormwater

Stormwater infiltration

Please print or type in the unshaded areas only.	EPA ID Number (copy from Item 1 of Form 1) VAD988166443	Form Approved. OMB No. 2040-0086. Approval expires 5-31-92.

FORM 2E NPDES

EPA Facilities Which Do Not Discharge Process Wastewater

I. RECEIVING WATERS

For this outfall, list the latitude and longitude, and name of the receiving water(s).

Outfall Number *(list)*	Latitude			Longitude			Receiving Water *(name)*
	Deg	Min	Sec	Deg	Min	Sec	
003	36.0(	50.0(	17.0(	76.0(	15.0(	54.0(	Eastern Branch Elizabeth River

II. DISCHARGE DATE *(If a new discharger, the date you expect to begin discharging)*

III. TYPE OF WASTE

A. Check the box(es) indicating the general type(s) of wastes discharged.

☐ Sanitary Wastes ☐ Restaurant or Cafeteria Wastes ☐ Noncontact Cooling Water ☑ Other Nonprocess Wastewater *(Identify)*

B. If any cooling water additives are used, list them here. Briefly describe their composition if this information is available.

Outfall is used for fire suppresion pumps which draw water from the Elizabeth River for the means of fighting fires. No additives are used in the process of intake or discharge

IV. EFFLUENT CHARACTERISTICS

A. Existing Sources — Provide measurements for the parameters listed in the left-hand column below, unless waived by the permitting authority *(see instructions)*.

B. New Dischargers — Provide estimates for the parameters listed in the left-hand column below, unless waived by the permitting authority. Instead of the number of measurements taken, provide the source of estimated values *(see instructions)*.

Pollutant or Parameter	(1) Maximum Daily Value *(include units)*		(2) Average Daily Value *(last year)* *(include units)*		(3) Number of Measurements Taken *(last year)*	(or) (4) Source of Estimate *(if new discharger)*
	Mass	Concentration	Mass	Concentration		
Biochemical Oxygen Demand (BOD)						
Total Suspended Solids (TSS)						
Fecal Coliform *(if believed present or if sanitary waste is discharged)*						
Total Residual Chlorine *(if chlorine is used)*						
Oil and Grease						
*Chemical oxygen demand (COD)						
*Total organic carbon (TOC)						
Ammonia *(as N)*						
Discharge Flow	Value					
pH *(give range)*	Value					
Temperature *(Winter)*		°C		°C		
Temperature *(Summer)*		°C		°C		

*If noncontact cooling water is discharged

V. Except for leaks or spills, will the discharge described in this form be intermittent or seasonal? ☑ Yes ☐ No

If yes, briefly describe the frequency of flow and duration.

Used only in the case of fire emergency or testing.

VI. TREATMENT SYSTEM *(Describe briefly any treatment system(s) used or to be used)*

The fire pump provides emergency fire suppression services to Drydock #1 and the general yard area.

VII. OTHER INFORMATION *(Optional)*

Use the space below to expand upon any of the above questions or to bring to the attention of the reviewer any other information you feel should be considered in establishing permit limitations. Attach additional sheets, if necessary.

RECEIVED – DEQ
APR 29 2016
Tidewater Regional Office

VIII. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title	B. Phone No. *(area code & no.)*
Dan Tegtmeyer / Asst. Environmental Manager	757-323-2599
C. Signature	D. Date Signed
[signature]	04/29/16